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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,298	06/02/2005	Tomohisa Tenra	043890-0746	8367
20277 7590 03/24/2010 MCDERMOTT WILL & EMERY LLP 600 13TH STREET, N.W. WASHINGTON, DC 20005-3096				
EXAMINER				
THOMAS, ALEXANDER S				
ART UNIT		PAPER NUMBER		
1794				
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03/24/2010		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/537,298

Applicant(s)

TENRA ET AL.

Examiner

Alexander Thomas

Art Unit

1794

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-27 is/are pending in the application.
- 4a) Of the above claim(s) 3-7, 15-17 and 20-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-14, 18, 19 and 27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-06)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/16/10 has been entered.

Response to Arguments

2. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 11, 13, 14, 18, 19 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Japanese patent document 10-110,887 Tanimoto in view of Edgel 4,579,756. The primary reference discloses a vacuum heat insulator comprising a gas barrier envelope with a heat sealable layer 3 wherein first and second layers of the envelope (i.e. top and bottom layers of the envelope) cover top and bottom sides of flat core members 2 and are heat-sealed around the core members, i.e. at portions where the core members are not disposed between the first and second layers of the envelope; see Figure 1 and the Abstract. The envelope is disclosed as heat sealable

and therefore contains a heat sealable layer. Concerning the shape of the "border region" as defined in claim 27, the primary reference's product, as shown in Figure 1, has a border region shape that corresponds to the periphery of the core member. Also, see the Board of Appeals decision dated 6/4/09, page 12, first and second full paragraphs, which confirms that Tanimoto discloses the claimed border region structure. However, the primary reference does not disclose the core members being laid out "in a lattice or zigzag layout". The secondary reference discloses similar vacuum insulation wherein the core members are laid out in a lattice or zigzag layout (see Figures 9 and 10) and may be folded to fit a particular end use (column 3, lines 24-29). It would have been obvious to one of ordinary skill in the art to place the core members in the product in the primary reference in a lattice or zigzag array as taught by the secondary reference in order to allow the insulation to be shaped to fit to a particular end use. The terms "heated", "pressed" "cut off" and "cut off by melting down" used in the instant claims 2, 11, 13 and 14 are process limitations that do not add any structurally features to the final product that would distinguish it over the prior art product. Concerning claim 13, there are widths of heat sealed portions between the core pieces 2 in the product of the primary reference; see Figures 1 and 2. Concerning claim 19, it would have been obvious to one of ordinary skill in the art to make the insulation product of the reference any particular size depending on the particular end use since such a modification would have involved a mere change in the size of a component and a change in size is generally recognized as being within the level of ordinary skill in the art.

5. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Japanese patent document 10-110,887 Tanimoto in view of Edgel 4,579,756 as applied to claims 11, 13, 14, 18 and 27 above, and further in view of the Japanese patent document 08-303686 Miyoshi. Tanimoto and Edgel disclose the invention substantially as claimed as noted in the above rejection under 35 USC 103. However, they do not disclose providing a hole in their products. Miyoshi discloses providing a hole through a vacuum insulation product wherein the enveloping material can be cut through after forming the product. It would have been obvious to one of ordinary skill in the art to provide a hole in the products of the primary references in view of the teachings in Miyoshi in order to allow a tube, etc., to run through the insulation after installation.

6. Claims 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over the Japanese patent document 10-110,887 Tanimoto in view of Edgel 4,579,756 as applied to claims 11, 13, 14, 18 and 27 above, and further in view of the Japanese patent document 08-303686 Miyoshi. Tanimoto and Edgel disclose the invention substantially as claimed as noted in the above rejection under 35 USC 103. However, they do not disclose Stroobants 6,322,743. Tanimoto and Edgel disclose the invention substantially as claimed; see the above rejection under 35 USC 103. Stroobants discloses the desirability of applying heat and pressure to a vacuum insulation panel during evacuation and sealing to improve flatness; see column 2, lines 6-37. It would have been obvious to one of ordinary skill in the art to apply pressure and heat to the envelope and core of the primary reference's product in view of the teachings in the secondary reference in order to prevent wrinkles in the final product. If heat/pressure is

applied to the entire laminate of the primary reference during heat sealing as suggested in the secondary reference than the envelope will become bonded to the core material as a result of its softening during heat sealing.

Allowable Subject Matter

7. If the following changes were made to claim 27, all of the rejected claims would be allowed: delete the phrase "lattice layout or" in the third to the last line; and in the second to last line delete the phrase "two or more" and replace with – four –.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Thomas whose telephone number is 571-272-1502. The examiner can normally be reached on 6:30-4:00 M-THUR.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Sample can be reached on 571-272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alexander Thomas/
Primary Examiner
Art Unit 1794